## **Scoping Report**

# for Proposed Additions to the James Campbell National Wildlife Refuge Kahuku, O`ahu, Hawaii

City and County of Honolulu

February 2005

## I. INTRODUCTION

The U.S. Fish and Wildlife Service (Service) is developing a feasibility and environmental effects study on a proposal to acquire land as an addition to the James Campbell National Wildlife Refuge (Refuge). The Refuge is one of the premier recovery areas on O`ahu for four species of endangered Hawaiian waterbirds and supports a variety of migratory waterfowl and shorebird species and other native wildlife. The study area for the proposed Refuge expansion includes lowland coastal areas that are immediately adjacent to the current Refuge in the Kahuku coastal plain (figure 1). This area features wetlands, beach coastal dunes, and strand habitats that the Service is interested in protecting and managing as part of the National Wildlife Refuge System. An interdisciplinary team comprised of refuge managers and biologists, public use specialists, planners, wetland and endangered species recovery biologists is developing a range of potential land protection alternatives.

All the lands in the study area are owned by a single landowner, the Estate of James Campbell, a willing seller. The Estate leases most of the Kahuku coastal area to tenants who use the lands for commercial aquaculture, commercial fruit and vegetable farms, and horse and cattle grazing.

The lower part of the Kahuku watershed, including our study area, is the subject of an important cooperative multi-agency flood control project that is being developed by the Army Corps of Engineers (ACOE). We are concerned with the impact of flooding on the community and have participated for years in planning efforts to address this issue. We remain committed to helping reduce flood damage and hazards in the Kahuku area through strategic management of lands we own and manage in the area. Our proposal to expand the Refuge will address our participation in the ACOE's flood hazard reduction project.

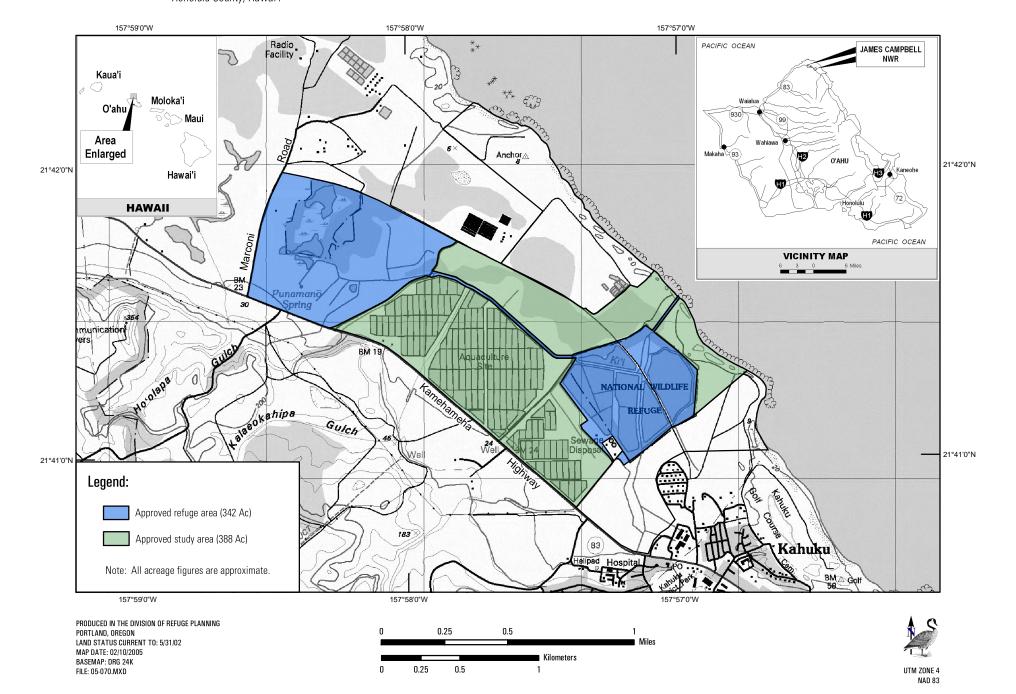
This report summarizes issues and concerns that were identified during our pre-planning scoping process. It will be sent to people who responded to the first Planning Update, placed on the U.S. Fish and Wildlife Service's Division of Refuge Planning website (see pg. 19), and included in our detailed planning documents.

## U.S. Fish & Wildlife Service

## **James Campbell National Wildlife Refuge**

Honolulu County, Hawai'i

Approved Study Area



#### II. SUMMARY OF THE SCOPING PROCESS AND RESPONSES

In April 2004, we distributed a Land Protection Planning Study Planning Update (#1) describing our general proposal to interested parties that included the landowner and tenants; Ko`olauloa Neighborhood Board; Kahuku Community Association; local, state, and federal agencies; conservation organizations; the University of Hawaii Sea Grant College Program; and local newspapers. Our early outreach included our participation in Kahuku Flood Control Task Force meetings and at neighborhood board meetings where the topic of a proposed expansion of the Refuge has been presented to the board and meeting attendees.

In response to our request for input on our early proposal, we received 12 letters, a phone call, and approximately 640 signatures on a petition. In general, there is widespread support for flood hazard reduction in Kahuku. Many of the responses we received during the scoping phase showed members of the community are concerned about how the project might affect the local economy. The letters urged us to study the effects on aquaculture, jobs, the local economy, businesses that rely on products from the planning area, the availability of specialty fresh seafood and other products produced in Kahuku. There is community concern about the potential effects on existing tenants' abilities to continue to successfully operate their businesses. Many people want aquaculture to remain in the Kahuku area. Two individuals who operate an aquaculture business in the planning area expressed their concerns about what they believe the potential effects of the Service acquiring land will be on their commercial aquaculture operation and their personal futures. Individuals who are concerned about the conservation of coastal habitats and native wildlife in Kahuku provided supportive feedback on the preliminary concept for an addition to the Refuge.

## III. ISSUES AND CONCERNS

#### A. Alternatives

Our planning documents will include a no-action alternative. Under this alternative, the Service would not acquire additional land at the Refuge for habitat and wildlife protection or for flood control.

In addition to the no-action alternative, a range of feasible action alternatives will be considered. A range of alternatives will result in a variety of sizes and specific sites for the proposed addition to the Refuge.

After reviewing our proposal, some members of the public suggested new alternatives for our consideration:

• Acquire only the lands that are needed for flood control and exclude areas that are leased for farms and aquaculture ventures. The letters stated the belief that land that is needed for the future flood project contains suitable and sufficient wildlife habitat and could result in 400 acres of new habitat for the Refuge to manage. A petition signed by several hundred people requested that approximately 400 acres that are currently used for aquaculture or agriculture production be removed from the study area.

- Acquire land that is currently being used for intensive aquaculture or agriculture only after current tenants have been given an opportunity to buy the land they lease.
- Acquire land that is in aquaculture production and allow aquaculture enterprises to be conducted on the Refuge in perpetuity. Several respondents presented the view that commercial aquaculture can co-exist with and is conducive to wildlife conservation. The comment letters describe aquaculture ponds that "supply a rich food source" and state "pond edges and banks provide nesting and nursery habitats." Another respondent suggested that during the interim management stage, if commercial aquaculture operations become part of the managed Refuge, "programs such as predator control and a set aside of some areas for nesting cover for coots and moorhens will be important to enhance those areas."
- Acquire all land needed for wildlife habitat and wildlife management except the lands that are currently being used for aquaculture.
- Some respondents expressed concern about the size of the proposed Refuge expansion believing that the proposed Refuge does not need to encompass the entire study area. The respondents referred to a preliminary ACOE report that mentioned a need for 50 to 150 acres for the flood hazard reduction project. Others supported the inclusion of all the lands in the area of interest for the benefit of wildlife and people.

**Response:** Our interdisciplinary planning team will consider the range of alternatives that resulted from our scoping. If any of these alternatives are not studied further, reasons will be explained in our planning documents. Alternatives that are not reasonable or feasible, or that would not meet the purposes, goals, and objectives of the proposed project will not be considered further. Therefore, our detailed analysis may not include all alternatives identified in the scoping phase.

#### **Discussion:**

## Location and features

The planning area is located in the Kahuku coastal plain and includes only lands that are owned by the Estate of James Campbell. The Kahuku coastal plain features some of the best undeveloped coastal lowland wetlands, dunes, and coastal strand habitat on O'ahu. Land in the planning area could be managed as high quality wildlife habitat with some areas serving as management buffer areas.

We are authorized to study a proposed Refuge expansion within an area approximately 388 acres in size in the Kahuku coastal plain. This area includes lands between the Refuge units, the large aquaculture facilities adjacent to Kamehameha Highway, and a portion of wetland, dunes, and coastal strand habitat seaward from the Ki'i Unit (see map on Page 2).

One alternative that will be considered is one in which the Service would acquire all the land within the approved planning area. This area features high quality wildlife habitats that have importance for endangered species and migratory bird habitat, coastal plant and animal habitats, and some management buffer areas. This alternative also includes areas that are likely to be needed to help implement the Army Corps of Engineers' (ACOE) flood hazard reduction project.

## Flood hazard reduction project

Our project area overlaps with an area the ACOE is studying as part of a flood control project. Although the ACOE's flood control study is not developed in detail, a reconnaissance-level study of Kahuku coastal floodplain was completed by the ACOE in 2003<sup>1</sup>, and indicated that natural or developed swales or depressions in the coastal plain may be useful for helping transport excess surface water away from developed areas. Other concepts might include the use of created flood storage areas. Some of the areas in the ACOE's area of focus are currently being farmed under short term (month-to-month) leases. Other areas that are in the ACOE's flood hazard abatement proposal include areas that are currently used for aquaculture under longer term leases.

One comment suggested the Service acquire only those lands needed for flood control. It is important to note that our primary goal in proposing to expand the Refuge is to assist with endangered water bird recovery as well as protect habitats for other migratory and resident wildlife. We believe that by expanding the Refuge land base we can assist with Kahuku flood hazard abatement efforts while also achieving our wildlife management objectives.

The details of the ACOE proposal may not be available to us at the time we complete our detailed environmental effects analysis. Nevertheless, our proposal for a Refuge expansion will use whatever information that is available to determine whether our ownership and management of land in Kahuku coastal area would or would not significantly adversely affect the ability of the ACOE or its partners to successfully implement a flood control project.

#### Leased lands

We understand that some tenants in the planning area want the lands they lease to be excluded from our planning area. We believe this proposal is made in hopes of preventing a change of land ownership that would affect the tenants' current lease status. However, if certain lands in the study area are not included in our planning boundary, a strong demand for coastal property and an interest by the landowner to sell its land holdings in Kahuku, make it very likely that the leased areas could eventually be sold to another buyer. Therefore, excluding leased areas from our study area would not necessarily prevent a sale of lands that are currently being leased. The exclusion of certain leased areas will be evaluated. Eliminating all leased areas from our study area would not allow us to study or develop a range of alternatives that includes protection and management of high quality wetland and coastal habitat.

<sup>&</sup>lt;sup>1</sup> U.S. ACOE. 2003. Kahuku Ecosystem Restoration, General Investigations Report, Section 905(B) Analysis. U.S. Army Engineer District, Honolulu. 20 pp.

The suggestion that the Service acquire lands that are being leased only after tenants have been given the opportunity to purchase the lands they lease will be considered by the interdisciplinary team. It should be noted that our proposal to acquire land as a Refuge addition would not prevent tenants from making offers to the landowner to purchase lands that we are interested in acquiring.

## Future land use and land use designations

Future land uses on areas adjacent to the Refuge have the potential to affect habitat and wildlife conservation and other Refuge management programs. Therefore, we need to consider the effects of potential future land use on the Refuge when considering possible Refuge configurations. Based on other existing and proposed activities in Kahuku, potential future uses of lands adjacent to the Refuge could include agriculture, aquaculture, golf courses, parks, conservation (by another entity), or the lands could potentially be rezoned for various types of development.

## Aquaculture areas

We are aware that endangered Hawaiian waterbirds may be seen foraging and resting within and around commercial aquaculture ponds as well as in drainage ditches and fallow areas. Shorebirds and wading birds will forage in ponds that have been recently drained for cleaning and maintenance. We are also aware that endangered waterbirds have built nests in areas that are outside of current Refuge boundaries including areas around aquaculture ponds. One response letter described nesting by an endangered Hawaiian waterbird on an aquaculture facility but the author did not elaborate on the specific type of habitat in which the nest was laid (e.g., more natural wetlands or man-made ponds). The letter did not mention whether the nesting was successful. Nests that are not within the Refuge are more vulnerable to predation by non-native mammalian predators (e.g., dogs, cats and mongoose) and to human disturbance than nests that are within the Refuge because threats are controlled on the Refuge through management actions.

The State of Hawaii has conducted bi-annual waterbird counts for many years in the Kahuku coastal plain. Observation stations include areas in commercial aquaculture and on the Refuge. We will use all available data and consultations with endangered species recovery biologists when we compare the suitability of commercial aquaculture facilities with the Refuge ponds for recovery and management of endangered Hawaiian waterbirds. This information will be useful as we develop recommendations for management to ensure compatibility of proposed aquaculture operations within the Refuge.

We plan to consider an alternative in which the expanded Refuge boundary would include commercial aquaculture as a secondary use only for existing leaseholders and through the year 2023. Under our proposal, tenants in the planning area that hold greater than month-to-month leases would be offered an opportunity to extend their leases, but the leases would not be transferable. Leases may have to be amended slightly to include provisions to minimize commercial use conflicts with resource management and help ensure compatibility with Refuge purposes. These provisions will be discussed in our planning documents.

As suggested by the response letters, our interdisciplinary team will consider an alternative in which the Service would permit aquaculture on the Refuge in perpetuity.

## Size of proposed addition

Our study area is limited to the area shown in the map as the approved study area. The maximum area we are authorized to study as a Refuge addition is approximately 388 acres. Although the configuration, size, and specific location of alternatives for the proposed addition have not yet been determined, we are interested in protecting high quality wetland and coastal dune habitats in Kahuku coastal plain within the Refuge system. The proposed Refuge addition would include important Refuge management buffer areas and may include areas that would likely be needed for the ACOE's flood control project.

## B. Flooding Problems

The natural geography and hydrology of Kahuku support naturally occurring wetlands in the coastal plain. In addition to naturally wet areas, the project area and nearby Kahuku town are repeatedly subject to serious flooding problems that impact the entire community. The ACOE is currently developing a flood control project in the same area as the proposed Refuge expansion. Many of the response letters expressed concerns and questions about the recurring flooding problems in the Kahuku floodplain and about our role in the flood control project. The following is a summary of the concerns that we are aware of regarding the proposed Refuge expansion and flooding:

- The Ko'olauloa Neighborhood Board (Board #28) supports the Service's proposed Refuge expansion and at their February 13, 2003 meeting, endorsed the concept of Service involvement in the Refuge expansion and the flood control project. The Board encouraged the Service to take into consideration the protection of agriculture and aquaculture lands as it pursues a Refuge expansion project.
- Some respondents want the Service to wait until the ACOE completes its flood hazard reduction proposal before proceeding with a Refuge addition proposal.
- Our management of existing Refuge areas including Refuge ponds and drainage ditches including the Ki'i outlet is of concern to some respondents. We received responses that indicate some people think that Service maintenance of ditches and Refuge contribute to flooding problems in Kahuku.
- Some respondents wanted to know who would be responsible for maintaining the flood control infrastructure and whether there would be a dedicated source of funding.
- One respondent stated their belief that the Service's participation in the proposed flood hazard reduction project is "limited and incidental" to other priorities.

- A respondent informed us that the flood control project will enable families to secure funding to build and insure new homes on lands immediately adjacent to the project area. Minutes of the Ko'olauloa Neighborhood Board (#28) meeting dated February 13, 2002, mention that 177 families are awaiting resolution of the flood issues before they can move into homes. They have been waiting for years for this issue to be resolved.
- A respondent objected to the concept that the proposed flood hazard reduction project would benefit residences, while eliminating farms and aquaculture ventures. The respondent stated that aquaculture farms suffered more damage in floods than homes, and therefore should not be harmed by a flood hazard reduction program.
- A respondent stated that the State of Hawaii's flood control study will not be effective.
- We received comments that the FWS increases the flood hazard by no longer opening Ki'i outfall to the ocean during heavy rains, and by removing a drain pump and installing a permanent berm. There were also comments that the Service has not provided for adequate silt removal in flood control channels or for maintaining the drain pump.

**Response:** The Service shares the community's concerns about flooding in Kahuku and will continue to work with interested parties to help address flooding issues. Our detailed planning documents will describe the hydrology of the area, and our proposed role in the ACOE's flood control project at Kahuku. As noted previously, our primary goal in proposing to expand the Refuge is to assist with endangered waterbird recovery as well as protect habitats for other migratory and resident wildlife. We believe that by expanding the Refuge land base we can assist with Kahuku flood hazard abatement efforts while also achieving our wildlife management objectives.

## **Discussion:**

## Our participation in the ACOE's proposed flood hazard reduction project

As a land manager and tenant in Kahuku for over 30 years, our agency has taken an active role in meetings and supported efforts to reduce flood hazards in Kahuku. When the ACOE, the community, and other interested parties sought a public agency to serve as a landowning sponsor for the Kahuku flood hazard reduction project, we were the only Federal agency that came forward and expressed a desire to assist with this project. As a landowner and land manager in the flood control study area, we would be working cooperatively with local, State, and other Federal entities to develop and study alternatives and potentially assist with some portion of the maintenance of the flood control areas.

The ACOE has begun the feasibility and initial design phase of its flood control project and expects to begin public scoping meetings in the spring of 2005 (ACOE, personal communication). Our Refuge expansion proposal will be moving forward as a separate project that incorporates what is known about the ACOE project at the time that our planning documents are prepared. We need to move ahead with our detailed planning process because the landowner has expressed an interest in selling its landholdings in Kahuku before the year 2007. Other

factors contribute to our need to complete our detailed planning process now. We have an interested and motivated seller, support from Senator Inouye for land protection and flood control initiative, a competing strong demand for coastal property, serious need for flood hazard reduction within the community, and we have a long term interest in conserving an important coastal dune, strand and wetland ecosystem on O`ahu.

The ACOE and the Service and other public agencies are working together to help reduce flood hazards in order to protect life and property in Kahuku. We will continue to participate in the Kahuku Flood Control Task Force meetings and in the ACOE's flood control project to the extent feasible. While our Refuge expansion proposal includes the acquisition of some of the land that may be needed for the future flood control project, the design and build out of the actual flood control project will be separate and distinct from our land protection and acquisition proposal because the details are not available at the time of our planning work. The details of the flood control project are not needed in order to properly evaluate the effects of land acquisition and management on the environment.

We will work closely with the ACOE to include an up-to-date conceptual description of the proposed flood hazard reduction project. If such information is available, we will describe the areas likely to be needed for the project, the conceptual design of the project, and likely conceptual management of the land, wildlife, and flood control on areas that may be within the future Refuge boundary. The management of flood areas will be described in a conceptual manner that includes a description of the party or parties that will be responsible for maintenance of these areas and likely sources of funding for maintenance.

#### Other flood control studies

The State of Hawaii is pursuing a flood hazard control study for Windward O'ahu which will study the flood hazards in other communities on the windward side of O'ahu including La'ie, Malaekahana, Hau'ula, and Ka'a'awa. The U.S. Geological Survey is just finishing a study of flood frequency estimates for O'ahu and we may have access to that data when we discuss the affected environment in our documents.

## Hydrological studies

Our detailed planning documents will present a summary of information known about the hydrology of Kahuku. We will use information that already exists in technical reports. For informational purposes, we will include a general description of current Refuge water management practices such as average water depth in ponds, information about the lack of interaction of pond water with subsurface water, current maintenance of ditches, current management of the Ki'i Unit water levels, Ki'i outlet, and current well-water pumping regimes.

Studies on the hydrology and flooding in Kahuku do not give any evidence that our shallow Refuge ponds, or our management of the Refuge units, ditches, or the Ki'i outlet are the cause of flooding in Kahuku. Flooding occurred in the low-lying areas of Kahuku for many years before the Refuge was established and is a natural phenomenon that affects a wide portion of the region. The low-lying Kahuku coastal plain was an extensive freshwater wetland prior to the

introduction of sugar cane during the late 1800's and a report by hydrologists of the time document extensive marshes and a surplus of freshwater at Kahuku in 1889.

A 2003 ACOE reconnaissance level assessment of the flood problems at Kahuku states that "the flood problem for the town of Kahuku and the Ki`i Unit Wildlife Refuge is attributed to inadequate channel capacity, the accumulation of vegetation and debris in 'Ohi`a Stream, Kalaeokahipa Stream and Hospital Ditch, and the single, narrow Ki`i outlet which is often plugged with sand."

Contrary to the concerns expressed during scoping, Refuge staff does help to maintain the East-West ditch (also called "Punamano ditch") to ensure the ditch is not clogged with vegetation. The staff periodically mows ditch banks and removes vegetation in the ditch. The Ki`i outlet ditch is periodically opened using heavy equipment when a sand plug develops. However, the sand often quickly becomes re-deposited at the mouth of Ki`i outlet due to natural wave action, shoreline transport, and the shifting of sand dunes. This means that Ki`i outlet ditch can not feasibly be kept open at all times. The Refuge also runs pumps to help move water off of the lower areas of the drainage system, particularly in advance of storms. However, the volume of surface water exceeds the capacity of the existing ditch and drainage system.

The ACOE is in the process of developing a proposal to alleviate the flooding problem and will help to develop best management practices by all responsible parties for flood hazard reduction.

Our planning documents will not address the effects of the ACOE flood control project on land use and commercial ventures in the coastal plain. Since we do not have the lead in the flood hazard reduction project it is unknown at this time what effects the ACOE project may have on aquaculture land compared to other land uses.

## C. Social and Economic Issues and Concerns

Many of the comment letters expressed concerns about the social and economic effects of a proposed Refuge expansion which could eventually result in land use changing from agriculture (including farming and grazing), aquaculture, and fallow areas to restoration and management of the area for native habitat and wildlife conservation. Following is a summary of the socioeconomic issues noted to date:

- A respondent mentioned that the land is either currently protected or will be protected from up-zoning (up zoning referring to potential changes of the land use designation from "Agriculture" to "Urban" or "Resort").
- A respondent objected to the acquisition of lands zoned "Agriculture" for use for conservation purposes. The respondent believes the land in Kahuku is highly productive for aquaculture and agriculture.
- We were informed that some tenants who lease lands from the Estate of James Campbell within the area of interest have made offers to the landowner to purchase the lands they lease

- One respondent voiced an opinion that the Federal relocation program is "totally inadequate to fund relocation of aquaculture farms." It was also mentioned to us that the relocation is not an option because there are no other similar areas available for aquaculture.
- The proprietors of one tenant-owned and operated business informed us that they do not support a proposed lease extension. They believe the terms of the proposed lease extension are such that they will not be able to recoup the equity they have built in their business. They state that a 20-year lease is not likely to preserve their business for long. They advised us that the proposed limitation that leases would not be transferable prevents tenants from being able to sell their business. Therefore, they argued that they would lose all the time and money they invested in their business which they were counting on being able to sell for their retirement income.
- Another concern about the proposed lease extension is based on what tenants are reporting they have heard from other farmers who operate farms on the Hanalei National Wildlife Refuge. The comment was that the Service has "arbitrary policies" or "changing enforcement" due to managerial changes and that leases do not allow tenants to perform needed maintenance
- Several comment letters expressed concerns that the Kahuku area is economically depressed. There are concerns about the potential effects of the proposed Refuge addition on jobs and the local community. We received information that states that Kahuku-based aquaculture and agriculture business contribute to the local and regional economy. Contributions include local expenditures, tax revenues, jobs, seafood production, roadside shrimp stands, and other economic contributions. Fifty jobs are reported to be associated with the aquaculture ventures and revenues are in excess of \$3 million from the aquaculture businesses alone, not counting multiplier effects. One comment letter stated the respondent's belief that the proposal would eliminate several of O`ahu's best-known and most productive aquafarms. Another letter stated the respondent's belief that the proposal would cause the total demise of the aquaculture industry in Hawaii. Another comment mentioned that there are other small stores who sell their products who would go out of business if the aquaculture venture in Kahuku were to go out of business.
- A statement was made that Kahuku is the only area left where large scale freshwater and saltwater aquaculture can be conducted because the hydrology of the area allows freshwater and saltwater wells to be located in close proximity to each other. Another respondent stated that Kahuku is unique in that it is particularly sunny as compared to many other places and sun is an important factor that helps aquaculture shrimp and prawns grow at a rate that is sufficient for the business to be economically viable.
- One respondent was concerned that the project would violate Executive Order 12898 that directs government agencies to ensure that their projects will not have significant disproportionate adverse health and safety effects on members of low income or minority groups.

• A respondent noted that the James Campbell Refuge addition proposal ranked 158<sup>th</sup> out of 179 proposed additions or expansions of National Wildlife Refuges nationwide. The respondent stated their opinion that "given the high cost of land to acquire land in Hawaii, public money would be better spent on higher priority projects."

**Response:** We will include a description of the current social and economic setting and will evaluate the effects of the alternatives on the social and economic setting. An economic effects study will be prepared to address all relevant factors and will include an analysis that describes the likely effects of the alternatives on tenants who operate businesses in the study area, as well as off-site and cumulative effects of the alternatives.

#### **Discussion:**

#### Land use

We will include a description of the land use zoning, current land uses occurring in the Kahuku coastal plain, and an overview of land uses in adjacent areas. Land uses include wildlife management on the National Wildlife Refuge units, commercial aquaculture and agriculture (ti, banana, and other fruit and vegetable crops), horse and cattle grazing, commercial retail shops, restaurants and shrimp trucks, residential, military training, resort, hospital, school, recreation (e.g., shoreline fishing, picnicking, hiking along the coast), and a waste water treatment plant.

The habitat value of the area will be described including the current and potential value of the area for nesting endangered and threatened species, migratory birds, native damselflies, native anchialine shrimp, sea turtles, and native plants. The use of the area for conservation and flood control will be evaluated for consistency with the Koʻolau Loa Sustainable Communities Plan (county and local level planning), the Oʻahu General Plan, and with the current land use zone.

We will study whether there are any legal measures in place or proposed that would prevent the study area from being rezoned to a more intensive use. We are not currently aware of these protections in the Kahuku coastal area and are aware that there are processes that applicants may use to request a change in land use zoning.

Regarding the comment that it is inappropriate for lands in agriculture to be used for wildlife conservation purposes, we note that conservation is consistent with the regulations promulgated for the agriculture land use district.

## Interest by some tenants in purchasing lands they lease

We are aware that some tenants are interested in purchasing the lands they lease. It should be noted that our proposal will not prevent tenants from making an offer to the landowner to purchase the land they are leasing, nor will our proposal affect the landowner's ability to choose to whom it sells its lands.

## Effects of the proposal on business viability

While most of the tenant-owned businesses in the area of interest have expressed an interest in the proposed lease extension to the year 2023, one business believes the proposed lease has terms and conditions associated with it that would make it impossible to stay in business. Our proposal to extend operating leases to the year 2023 was made in order to minimize impacts on businesses and tenants who are operating businesses under leases that are longer than a month-to-month term. The idea for the lease extension is to provide tenants with ample time to operate their businesses and to plan for future changes.

We do not believe it is possible to determine the effect of the proposed long-term lease on the viability of tenant-owned businesses since we do not have control over all of the factors that determine success or failure of a private business venture.

The economic effects study will include a study of the comparative effects of the various alternatives on businesses in the project area.

Our interdisciplinary team will discuss ways in which we can ensure that we have considered the tenants' concerns about the potential effects of the proposed long-term lease and operating constraints on the viability of tenant-owned businesses. The results of our evaluation will be included in the detailed planning documents.

## Relocation

Federal agencies are required to provide relocation assistance to displaced persons, farms and businesses who are required to relocate as a result of a Federal land acquisition. The amount and form of the relocation assistance is not at the discretion of our agency, and benefits are established by law and can be reviewed in the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. 4601). The general benefits of the Federal relocation program will be described in our detailed planning documents. The Federal relocation program is designed to help minimize adverse effects of Federal real property transactions.

In summary, our planning documents will assess the effects associated with relocating eligible tenants but will not address the subjective issue of whether or not the benefits are "adequate." Relocation benefits are established by law and addressed on an individual basis.

#### Economic effects

The economic effects study will include the following features:

A description of the current economic and social setting. It will use existing Census 2000 information and any other existing data to evaluate the effects of the project.
Communities likely to be included in the study are Kahuku, La`ie, Hauula, and Sunset Beach. The economic contributions of commercial as well as non-commercial activities in the study area will be considered.

• Potential economic effects of the alternatives on the local community, other affected areas, tenants, and residents and on businesses.

## **Environmental Justice**

We will describe the effects of each alternative on nearby communities that have substantial numbers of low-income or minority groups. In evaluating the effects of the alternatives on low income or minority groups, the Service plans to use the analyses presented in the report entitled, "Environmental Justice in the OMPO (O`ahu Metropolitan Planning Organization) Planning Process: defining environmental justice populations" (March 2004). This report uses the best available scientific methods to help refine determinations of where low income or minority environmental justice groups are located on O`ahu– a challenge in view of the fact that in Hawaii a majority of the population falls into the U.S. census definition of "minority." Using methods that are scientifically appropriate, this report found that the communities of Kahuku, La`ie, and Hauula are environmental justice areas because of the occurrence of a large percentage of persons of "Native Hawaiian and Other Pacific Islander" ethnic background in the communities. None of these communities is classified as a low-income area as defined by the appropriate poverty guidelines.

## Cost of land as a factor in deciding which areas to protect

It is true that land prices in Hawaii are expensive especially when compared to some mainland areas. This project also has very high resource values. The Kahuku coastal area is one of the last remaining coastal ecosystems on O'ahu and the wetlands and dune habitats are of substantial importance to large numbers of endangered, threatened, rare, and other native wildlife species. Refuge expansion would allow the Service to protect and assist in the recovery of several endangered and threatened wildlife species, and would allow for the conservation of native wildlife of the Kahuku coastal wetlands, dune, and strand areas.

The agency is very careful to expend public money only on lands that are of substantial value to achieving the mission of the National Wildlife Refuge System. The Service follows a very rigorous evaluation, ranking, and approval process. The Service's Land Acquisition Priority System (LAPS) uses certain quantitative and qualitative parameters to rank land protection proposals. This system does not necessarily permit a direct comparison of all land protection projects in Hawaii to projects in other states which in part explains the ranking that the respondent reported.

## D. Refuge Management Topics of Concern

- The proposed land protection project received support from biologists and conservation organizations who are in favor of protecting and restoring the coastal habitats and native wildlife of Kahuku.
- A respondent was concerned that the discontinuity and small size of the current Refuge units severely limits the Refuge's wildlife management programs.

- Some respondents were concerned that if aquaculture farms were to close down, more wetlands would be destroyed than would be created by the Service. The respondents mentioned that some areas of commercial aquaculture farms (e.g., pond banks) support endangered Hawaiian waterbirds and shorebirds. One respondent wrote that aquaculture ponds provide "increased productivity and supply a rich food source that surpasses that of the wetland and marshes at the Refuge." One respondent stated that when AmOrient (a former large commercial aquaculture enterprise) went out of business, the ponds were replaced by invasive weeds and many birds died.
- Several respondents replied that commercial aquaculture ponds provide suitable habitat for endangered waterbirds and migratory waterfowl. Several letters stated that all 300 acres of aquaculture ponds are wetland habitat for endangered waterbirds and migratory waterfowl.
- A respondent stated that the proposed expansion would do little to increase the population of native birds in Kahuku overall.
- A respondent asked how the Service will manage the dunes for native coastal wildlife species without severely limiting beach access. In the same comment, the respondent mentioned that coastal access is a right and tradition and that restrictions can become contentious.
- One respondent questioned the Service's capability to assume management of the ponds now used for commercial aquaculture.
- Respondents wanted to know whether the Service would be able to maintain the current habitat as well as an addition to the Refuge. They wanted to know if an addition to the Refuge would be compatible with current management programs and whether there would be sufficient funding.
- Respondents wanted to know whether flood control would be compatible with Refuge purposes.
- A respondent wondered who is responsible for ditch and Ki`i outlet maintenance and who would be responsible in the future.
- A respondent wrote that, "Service policy 715 FW 1 specifies cooperation between the Service and aquaculture interests." The respondent believes this policy requires the Service to build a mutually beneficial relationship with the aquaculture industry.

**Response:** Our land protection proposal seeks to protect of one of the last remaining wild coastal dune and wetland habitats on O'ahu. Our detailed planning documents will describe current and conceptual future management under each alternative. Scoping comments will be considered as we develop our conceptual management plan.

#### **Discussion:**

## Conservation of native wildlife species

The proposed action would provide additional habitat for the benefit of native wildlife species that are currently protected and managed on the Refuge including all four species of endangered Hawaiian waterbirds, a variety of migratory waterfowl and shorebirds, and the native Hawaiian owl. Inclusion of coastal strand and dunes in the Refuge would allow us to also protect other coastal species including green sea turtles, seabirds, a variety of native coastal plants, and possibly haul out areas for endangered monk seals. The addition of land to the Refuge would allow for a greater level of management and recovery of native wildlife because we could protect and manage a larger and more contiguous area of diverse wetland habitats, transition areas, and portions of the coastal dune and strand in perpetuity.

## **Endangered species**

Our detailed planning documents will include a discussion on the potential effects of alternatives on endangered species protection and recovery. We will coordinate our proposal with endangered species biologists in accordance with provisions of the Endangered Species Act of 1973, as amended. We will also coordinate the project with the National Marine Fisheries Service because of potential effects on endangered Hawaiian monk seals and threatened green sea turtles. As part of this review, wildlife biologists will study data from past State waterbird counts for both Refuge and non-Refuge areas to help us evaluate the potential impacts of the various alternatives on endangered waterbirds.

We do not have data to support the statement that endangered waterbirds died after the Kahuku sugar mill was closed. Waterbirds are highly mobile and will fly to other areas that do have water.

It is not possible to describe in detail how the aquaculture ponds would be managed after leases expire or are terminated by the tenants. Some ponds may be restored to mimic natural functioning wetlands, and some might be reconfigured to be managed pond units. However, we would discuss detailed proposals for habitat management during future comprehensive conservation planning for the Refuge. For the purposes of the land protection and acquisition proposal, pond management under various alternatives would be described in a conceptual manner.

#### Habitats in the planning area

Despite the lack of detailed information that would be available to us at this time, we will be able to evaluate the qualitative effects of the alternatives on endangered waterbirds that occur in the area. As part of detailed planning, our biologists will summarize the various habitat types in the planning area. This will include areas on the existing Refuge, natural wetlands, fastlands, and aquaculture ponds. We will extract and report on information on the known habitat use by

endangered waterbirds and migratory waterfowl and shorebirds. We will rely on data from biannual State waterbird counts and documented observations of use of aquaculture ponds and banks and natural wetlands associated with those farms in our comparative assessments.

## Use of commercial aquaculture facilities by endangered waterbirds

Biologists agree that there is some use of pond berms, pond waters, and recently-drained ponds by endangered waterbirds and other native species including the common migratory Pacific golden plovers and resident black-crowned night herons. Further analysis of this topic will be addressed in our planning documents.

## Importance of additional Refuge lands to wildlife

Service data solidly demonstrate that management of National Wildlife Refuge System lands in Hawaii has protected habitat for endangered waterbird populations and resulted in endangered waterbird population increases over time. The protection and management of additional high quality wetlands and dune habitats are among the primary tasks required for recovery of endangered Hawaiian waterbirds and threatened sea turtles. The protection of dune habitats would also protect the largest aggregation of rare bristle-thighed curlews in the main Hawaiian Islands, would allow the Service to protect and attract nesting seabirds that are native to the area, and would also help us to restore native coastal plant communities in their natural range.

## Coastal access

Existing public access to and use of the coastal areas will be described in our detailed planning documents along with the potential effects of the alternatives on access to and use of coastal areas. The conceptual management plan will describe any management actions the Service anticipates taking that might affect public access to and use of the coastline and the Refuge.

The project would not restrict access to the coastline along private roadways that are adjacent to the project area. Refuge managers might decide in the future that they need to erect perimeter fencing around the Refuge for habitat and wildlife protection or other management purposes. Such a fence would not affect public access to the coast or use of coastal resources. The shoreline itself would remain State-controlled since we are not proposing to include State-owned shoreline areas in our Refuge expansion proposal. The area of interest for Refuge expansion is adjacent to and inland from the shoreline and includes coastal dunes and strand vegetation areas. Our proposal and determinations regarding the effects of the alternatives on the coastal zone will be coordinated with the State of Hawaii Coastal Zone Management Program Office.

# <u>Capabilities of the Service to manage additional areas including aquaculture ponds and other areas</u>

We do not propose to manage ponds in the same manner as commercial aquaculture facility operators. At such time as aquaculture companies terminate their operations, the Service would have the option to use ponds as they are, manipulate ponds to simulate natural wetlands, use some ponds for flood control as might be necessary, and restore and enhance ponds to more

natural wetlands. It might be necessary to leave the ponds fallow until operating funds are available. A general description of potential future pond management will be included in the conceptual management plan. Our ability to manage the Refuge at optimal levels would be contingent on availability of operational funding. Land and water management on Refuges is done on a priority basis with some habitat being maintained in a custodial status until sufficient funding is available for improvements.

## Aquaculture and other commercial uses on the Refuge

Any uses that are not specifically wildlife management uses (e.g., public uses and commercial activities) would need to be evaluated for their compatibility with Refuge purposes.

If the Service were to acquire lands used for commercial aquaculture, and permitted commercial aquaculture, the commercial aquaculture activities would need to be found compatible with the Refuge purpose because it would be classified as a secondary commercial use on the Refuge. The terms of the permitted use would be described in the conceptual management plan. This would likely require operational changes such as a prohibition on predators (dogs and cats), and the right for the Service to manage outlying habitat areas and control mammalian predators (including rats and mongooses) and other operational guidelines. These are examples of the kinds of stipulations that may allow the Service to reach a finding of compatibility.

## Compatibility of flood control with Refuge purposes

One of the purposes of the proposed Refuge expansion would be to assist in a community flood hazard reduction project, so these structures and management activities would likely be compatible with Refuge purposes. There may be some constraints imposed on how the flood control structures are designed, where they are placed, and how management is conducted in order to ensure that the structures and their maintenance are protective of habitat and wildlife to the extent feasible. Conceptual flood design and maintenance will be discussed in the conceptual management plan.

## Management of ditches and Ki'i outlet

The Estate of James Campbell currently owns the Punamano ditch (also called "East-West Ditch) and other drainage ditches in the study area including the Ki'i outlet. The Service is required, as part of its lease, to assist the landowner with maintaining the Punamano ditch and other ditches within the current Refuge boundary including the Ki'i outlet. The current and proposed future maintenance of ditches and the Ki'i outlet will be described in the detailed planning documents.

#### Applicability of aquaculture cooperation policy to the proposed project

The Service policy provided in our Refuge Manual (section 715 FW 1) is intended to promote good will and a mutually beneficial relationship between the Service and aquaculture businesses wherever possible. This policy does not prevent the Service from acquiring land with aquaculture activities for a Refuge expansion. We plan to continue to have a cooperative relationship with the aquaculture industry.

#### IV. PLANNING PROCESS

We will begin to develop a detailed proposal that will include a statement of purpose and need, describe the proposed action and alternative, describe the affected environment, and evaluate the effects of the alternatives on the environment. The detailed planning documents will include a conceptual management plan, and a land protection plan showing proposed Refuge boundary alternatives. The draft EA and supporting documents will be distributed to the public for a 30-day public review and comment period. We plan to hold an informational meeting in the community to discuss the project and provide information to the public.

We will develop Planning Updates to inform interested members of the public of the status of this project. If you wish to be added to or deleted from our Planning Update mailing list, or have questions about the planning process, please contact:

Phyllis Ha, Ecologist U.S. Fish and Wildlife Service Box 50167 Honolulu, HI 96850 Telephone: (808) 792-9424

You may also visit our web site at: http://pacific.fws.gov/planning/draft/docs/HI-

PI/docsjamescampbell.htm

For information about the James Campbell National Wildlife Refuge, please contact:

Sylvia R. Pelizza, Refuge Manager Oahu National Wildlife Refuge Complex 66-590 Kamehameha Highway Room 2C Haleiwa, HI 96712-1484

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